| In | dex of | Claims |  |
|----|--------|--------|--|
|    |        |        |  |

| <b>Application</b> | Control No. |
|--------------------|-------------|
|--------------------|-------------|

Applicant(s)/Patent under Reexamination

09/588,109

HOSUK SONG

LUNGARO ET AL.

Examiner

2135

√ Rejected
= Allowed

(Through numeral)
 Cancelled

Non-Elected

A Appeal

Restricted

I Interference

O Objected

| Cla  | im                         | Date                                   |              |  |              |  |            |              |              |                        |  |
|--|----------------------------|--|--------------|--|--------------|--|------------|--------------|--------------|------------------------|--|
| Final  | Original                   | 7/16/07                                |              |  |              |  |            |              |              |                        |  |
| 1  | 1                          | =                                      |              |  |              |  |            |              |              |                        |  |
| 2<br>3<br>4<br>5<br>6                            | 1<br>2<br>3<br>4<br>5      | =                                      |              |  |              |  |            |              |              |                        |  |
| 3  | 3                          | =                                      |              |  |              |  |            |              |              |                        |  |
| 4  | 4                          | =                                      |              |  |              |  |            |              |              |                        |  |
| 5  |                            | =                                      |              |  |              |  |            |              |              |                        |  |
| 6  | 6                          | =                                      |              |  |              |  |            |              |              |                        |  |
| 7  | 7                          | =                                      |              |  |              | Ш  |            |              |              | Ш                      |  |
| 8  | 8                          | =                                      | _            |  |              |  |            |              |              |                        |  |
| 9  | 9                          | =                                      | <u> </u>     | _  |              |  |            |              |              | Щ                      |  |
| 10   | 10                         | =                                      |              | <u> </u>   |              | _  | <u> </u>   |              |              | _                      |  |
| 11   | 11                         | =                                      | $\vdash$     | <u> </u>   |              | $\vdash$   | $\vdash$   | $\vdash$     | <u> </u>     | <u> </u>               |  |
| 40   | 12                         | =                                      | $\vdash$     |  |              | -  | H          |              | $\vdash$     | Н                      |  |
| 12<br>13   | 13                         | =                                      | -            | <del> </del>                                     | <u> </u>     | $\vdash$   | Н          | <u> </u>     |              | Н                      |  |
| 13   | 12<br>13<br>14<br>15<br>16 | =                                      | <del> </del> | ├—   | $\vdash$     | $\vdash$   | H          |              | H            | $\vdash\vdash$         |  |
| 14   | 16                         | =                                      | $\vdash$     | $\vdash$   | <u> </u>     |  | -          |              | $\vdash$     | $\vdash \vdash$        |  |
| <u> </u>   | 17                         |  | $\vdash$     | ┢─   | H            | -  | <b> </b> - | -            | $\vdash$     | $\vdash \vdash$        |  |
| 15   | 18                         | =                                      | ┢╾           | $\vdash$   | -            | <del>                                     </del> | -          |              |              | $\vdash \vdash$        |  |
| 16   | 18<br>19                   | 늘                                      | ┝─           | $\vdash$   | -            | -  |            |              | -            | $\vdash$               |  |
| 17   | 20                         | ╘                                      | -            |  | $\vdash$     | ┢  |            |              | -            | Н                      |  |
| <del>                                     </del> | 21                         |  | -            |  | ┢            | $\vdash$   | _          |              | _            |                        |  |
|  | 22                         |  |              |  | $\vdash$     | 一  |            |              |              | Н                      |  |
|  | 21<br>22<br>23             |  |              |  |              | $\vdash$   |            |              |              |                        |  |
|  | 24                         |  |              |  |              |  |            |              |              |                        |  |
|  | 24<br>25                   |  |              |  |              |  |            |              |              |                        |  |
|  | 26<br>27                   | L.                                     |              |  |              |  |            |              |              |                        |  |
|  | 27                         |  |              |  |              |  |            |              |              |                        |  |
|  | 28                         |  |              |  |              |  |            |              |              |                        |  |
|  | 29                         |  |              |  |              |  |            |              |              | Ш                      |  |
|  | 30                         | L.                                     |              |  | <u>L</u>     | _  |            |              |              |                        |  |
| <u> </u>   | 31                         | <u> </u>                               | <u> </u>     | <u> </u>   | <u> </u>     | <u> </u>   | <u> </u>   | L_           | L            | Ш                      |  |
| <u> </u>   | 32                         | <u> </u>                               | ldash        | Ļ  | <u> </u>     | <u> </u>   | <u> </u>   |              | L            | Щ                      |  |
| ļ  | 33                         | $\vdash$                               | <u> </u>     |  | <u> </u>     | $\vdash$   | $\vdash$   | <u> </u>     | L            | Щ                      |  |
|  | 34                         | ├-                                     | $\vdash$     | $\vdash$   |              | <del> </del>                                     | <u> </u>   | H            | <u> </u>     | $\vdash$               |  |
|  | 35<br>36                   |  |              | $\vdash$   | $\vdash$     |  | $\vdash$   | $\vdash$     | <u> </u>     |                        |  |
|  | 37                         | ├                                      | $\vdash$     | $\vdash$   | -            | $\vdash$   | $\vdash$   | $\vdash$     | <u> </u>     | $\vdash$               |  |
| <del> </del>                                     | 38                         | $\vdash$                               | $\vdash$     | <del> </del>                                     | -            | $\vdash$   |            |              |              | $\vdash$               |  |
| <u> </u>   | 39                         |  | $\vdash$     | ├  | ├-           | ┢╌   | -          | <del> </del> | -            | $\vdash$               |  |
| <del>                                     </del> | 40                         |  | $\vdash$     | <del> </del>                                     | <del> </del> |  | $\vdash$   | $\vdash$     | <del> </del> | $\vdash \vdash \vdash$ |  |
| _  | 41                         | $\vdash$                               | $\vdash$     | <del>                                     </del> | $\vdash$     |  | $\vdash$   | $\vdash$     | $\vdash$     | $\vdash \vdash$        |  |
|  | 42                         | $\vdash$                               | 一            | <del>                                     </del> | $\vdash$     | $\vdash$   |            | <u> </u>     | $\vdash$     | Н                      |  |
|  | 43                         | <b>!</b>                               | Г            |  | Τ.           |  |            | Т            | $\vdash$     | $\vdash \vdash$        |  |
|  | 44                         |  | T            | T  | $\vdash$     | <u> </u>   | <u> </u>   | Г            |              | П                      |  |
|  | 45                         |  |              | T  | Ī            |  |            |              |              |                        |  |
|  | 46                         |  |              |  |              |  |            |              |              |                        |  |
|  | 47                         |  |              |  |              |  |            |              |              |                        |  |
|  | 48                         |  |              |  |              |  |            |              |              |                        |  |
|  | 49                         | ــــــــــــــــــــــــــــــــــــــ | L.           | <u> </u>   | <u> </u>     | Ц_   | <u> </u>   | <u> </u>     |              | Ш                      |  |
| L  | 50                         | <u> </u>                               | <u> </u>     | L_   | <u> </u>     | <u></u>  |            |              |              |                        |  |

| Cla          | Date     |          |          |          |   |          |    |          |          |          |
|--------------|----------|----------|----------|----------|---|----------|----|----------|----------|----------|
|              |          |          |          |          |   |          |    |          |          |          |
| <del> </del> | Original |          |          |          |   |          |    |          |          |          |
| Final        | ij       | - 1      |          |          |   |          |    |          |          |          |
| -            | 0        |          |          |          |   |          |    |          |          |          |
|              | 51       |          | $\dashv$ | _        |   | -        | -  | _        | Н        |          |
|              | 52       | $\dashv$ | -        |          |   |          |    | _        | $\vdash$ | _        |
|              | 53       | =        |          |          |   |          |    |          | -        | _        |
|              | 54       |          | -        |          |   | $\vdash$ | -  | -        |          |          |
|              | 55       | -        |          |          |   |          | -  | $\vdash$ | -        |          |
|              | 55       | $\dashv$ |          |          | - | Н        | -  | -        |          |          |
| -            | 56<br>57 |          |          |          |   |          |    |          | Н        |          |
|              | 58       |          |          |          | - |          |    |          | -        | _        |
| <b>-</b>     | 59       |          |          |          |   |          | -  | $\vdash$ | Н        |          |
|              | 59       |          |          |          | - | $\dashv$ |    | _        | Н        |          |
| -            | 60       |          |          |          |   |          |    |          |          |          |
| -            | 61       | _        |          | _        |   |          |    |          |          |          |
| -            | 62       |          |          |          | _ | _        | _  | _        | _        |          |
|              | 63       |          |          | <b> </b> | Щ |          | ļ  | _        | Щ        | _        |
| <u> </u>     | 64<br>65 |          |          |          |   |          | ļ  | <u> </u> |          |          |
| <u> </u>     | 65       |          | L.,      | <u> </u> |   | -        |    |          | <u> </u> |          |
|              | 66       |          |          |          |   | Щ        | L_ | <u> </u> | L        | <u> </u> |
| L            | 67       | _        |          |          |   | _        |    | L.       |          |          |
| <u> </u>     | 68       |          |          |          |   |          |    | <u> </u> |          | _        |
|              | 69       |          |          |          |   |          |    | <u> </u> |          |          |
|              | 70<br>71 |          |          |          |   |          |    |          |          |          |
|              | 71       |          |          | <u> </u> |   |          |    |          |          | _        |
|              | 72       |          |          |          |   |          |    |          |          |          |
| L            | 73       |          |          |          |   |          |    |          |          |          |
|              | 74       |          |          |          |   |          |    |          |          |          |
| <u> </u>     | 75<br>76 |          |          |          |   |          |    |          |          |          |
|              | 76       |          |          | L.       |   |          |    | <u> </u> |          |          |
|              | 77       |          |          |          |   |          |    |          |          |          |
|              | 78       |          |          |          |   |          |    |          |          |          |
|              | 79       |          |          |          |   |          |    |          |          |          |
|              | 80       |          |          |          |   |          |    |          |          |          |
|              | 81<br>82 |          |          |          |   |          |    |          |          |          |
|              | 82       |          |          |          |   |          |    |          |          |          |
|              | 83       |          |          |          |   |          |    |          |          |          |
|              | 84       |          |          |          |   |          |    |          |          |          |
|              | 85       |          |          |          |   |          |    |          |          |          |
|              | 86<br>87 |          |          |          |   |          |    |          |          |          |
|              | 87       |          |          |          |   |          |    |          |          |          |
|              | 88       |          |          |          |   |          |    |          |          |          |
|              | 89       |          |          |          |   |          |    |          |          |          |
|              | 90       |          |          |          |   |          |    |          |          |          |
|              | 91       |          |          |          |   |          |    |          |          |          |
|              | 92       |          |          |          |   |          |    |          |          |          |
|              | 93       |          |          |          |   |          |    |          |          |          |
|              | 94       |          |          |          |   |          |    |          |          |          |
|              | 95       |          |          |          |   | L        |    |          |          |          |
|              | 96       |          |          |          |   |          |    |          |          |          |
|              | 97       |          |          |          |   |          |    |          |          |          |
|              | 98       |          |          |          |   |          |    |          |          |          |
|              | 99       |          |          |          |   |          |    |          |          |          |
|              | 100      |          |          |          |   |          |    |          |          |          |

| Cla          | Date   |          |          |  |          |  |          |  |                   |                 |
|--------------|--|----------|----------|--|----------|--|----------|--|-------------------|-----------------|
|              |  |          |          |  |          |  |          |  |                   |                 |
| <u>a</u>     | Original   |          |          |  |          |  |          |  |                   |                 |
| Final        | Ē  |          |          |  |          |  |          |  |                   |                 |
| -            | ō  |          |          |  |          |  |          |  |                   |                 |
|              |  | -        |          |  |          |  |          | _  |                   |                 |
|              | 101<br>102   |          |          | -  |          |  |          |  |                   |                 |
|              | 102  |          |          |  |          | _  |          |  |                   |                 |
|              | 103  | $\Box$   | _        | _  | _        | ш  |          |  | _                 | $\dashv$        |
|              | 103<br>104<br>105                                    |          |          |  |          |  |          |  |                   |                 |
|              | 105  |          |          |  | $\Box$   |  |          |  |                   | Щ               |
|              | 106  |          |          |  |          | L  |          |  |                   |                 |
|              | 107  |          |          |  |          |  |          |  |                   |                 |
|              | 106<br>107<br>108<br>109                             |          |          |  |          |  |          |  |                   |                 |
|              | 109  |          |          |  |          |  |          |  |                   |                 |
|              | 110  |          |          |  |          |  |          |  |                   |                 |
|              | 111  |          |          |  |          |  |          |  |                   |                 |
|              | 112  |          |          |  |          |  |          |  |                   |                 |
|              | 113  |          |          |  |          |  |          |  |                   |                 |
| <b></b>      | 111<br>112<br>113<br>114<br>115<br>116               |          |          |  |          |  |          | П  |                   | $\sqcap$        |
| <u> </u>     | 115  |          |          | _  |          |  | -        | $\vdash$   |                   | $\vdash$        |
| $\vdash$     | 116  | $\vdash$ | _        | <del> </del>                                     | _        | $\vdash$   | $\vdash$ | H  |                   | $\dashv$        |
| <del> </del> | 117  |          |          | <del>                                     </del> |          | $\vdash$   | $\vdash$ | $\vdash$   | -                 | $\vdash$        |
| <del> </del> | 117  | $\vdash$ | _        | $\vdash$   | $\vdash$ | -  | $\vdash$ | $\vdash$   | -                 | Н               |
| <u> </u>     | 117<br>118<br>119                                    | H        | _        |  | <b> </b> | H  |          | $\vdash$   | $\vdash$          | $\vdash \vdash$ |
| ├            | 119  | $\vdash$ |          | -  | H        | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$          | $\vdash\vdash$  |
| ļ            | 120<br>121<br>122<br>123<br>124<br>125<br>126<br>127 | <u> </u> |          | $\vdash$   |          |  | <u> </u> | <u> </u>   | $\vdash$          | $\vdash \vdash$ |
| ļ            | 121  | _        | _        | <u> </u>   |          |  | _        | <u> </u>   | <u> </u>          | Щ               |
|              | 122  |          |          | _  | _        |  |          | L  | L.                | Щ               |
| <u></u> .    | 123  |          |          | _  |          |  | _        | L  | Ш                 | Щ               |
|              | 124  |          |          | L  |          |  |          | L  |                   |                 |
|              | 125  |          | _        |  |          |  |          | L  | _                 |                 |
|              | 126  |          |          |  |          | L  |          |  | L.,               |                 |
|              | 127  |          |          |  |          |  |          |  |                   |                 |
|              | 128  |          |          |  |          |  |          |  |                   |                 |
|              | 129  |          |          |  |          |  |          |  |                   |                 |
|              | 128<br>129<br>130                                    |          |          |  |          |  |          |  |                   |                 |
|              | 131  |          |          |  |          |  |          |  |                   |                 |
| <u> </u>     | 132  |          |          | Г  |          | Г  |          |  | Г                 | П               |
|              | 133  | П        |          | <b></b>  |          | Г  | <u> </u> | <u> </u>   |                   | П               |
| <u> </u>     | 134  |          |          | T  | $\vdash$ |  |          | $\vdash$   |                   | $\vdash$        |
| <b></b>      | 131<br>132<br>133<br>134<br>135                      | Н        | _        | ┢  | _        | <del>                                     </del> | <u> </u> |  |                   | H               |
| l            | 136  |          |          | T  | Т        |  | $\vdash$ | $\vdash$   |                   | Н               |
| $\vdash$     | 137  | $\vdash$ |          |  | <u> </u> | $\vdash$   |          | <del>                                     </del> |                   | Н               |
| $\vdash$     | 138  | $\vdash$ | $\vdash$ | <del> </del>                                     | -        | $\vdash$   | _        | <del> </del>                                     | $\vdash$          | H               |
| <del> </del> | 130  | -        |          | $\vdash$   | -        | -  | $\vdash$ | $\vdash$   | $\vdash$          | H               |
| $\vdash$     | 139<br>140   | $\vdash$ | $\vdash$ |  | $\vdash$ | $\vdash$   | $\vdash$ | -  |                   | $\vdash$        |
|              | 140  | $\vdash$ | -        | $\vdash$   | $\vdash$ | $\vdash$   |          |  | -                 | Н               |
| <u> </u>     | 141  | $\vdash$ | -        | -  | <u> </u> | ├—   | $\vdash$ |  |                   | Н               |
| <u> </u>     | 142  |          | Щ.       | $\vdash$   | <u> </u> | ├—   | $\vdash$ | ⊢  | ⊢                 | $\vdash \vdash$ |
| L            | 143  | L.       |          | <u> </u>   | _        | _  | <u> </u> | <u> </u>   | <u> </u>          | $\vdash \vdash$ |
| <u> </u>     | 144  |          | L        | <u> </u>   | <u> </u> | <u> </u>   | <u> </u> | ├  | ⊢                 | Ш               |
|              | 145  | <u> </u> | L_       |  | _        | <u> </u>   | _        | Ь  | ldash             | Щ               |
|              | 146  | L.       | L        |  | _        |  |          | <u> </u>   | ऻ                 | Ш               |
| ļ            | 147  |          | L        | oxdot  | <u> </u> | L  |          | <u> </u>   | $ldsymbol{f eta}$ | Ш               |
| L            | 148  |          |          |  | ļ        | L.   | <u> </u> | _  | <u> </u>          | Ш               |
|              | 149  | <u> </u> |          | _  | _        | <u> </u>   | L.       | L  |                   | Ш               |
|              | 150  |          |          |  |          |  |          |  |                   | Ш               |